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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,615	07/02/2007	Kunitoshi Watanabe	P001 00572	7889

34947 7590 10/20/2011

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EXAMINER	
PAK, JOHN D	

ART UNIT	PAPER NUMBER
1616	

NOTIFICATION DATE	DELIVERY MODE
10/20/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipmail@lanxess.com

Office Action Summary	Application No.	Applicant(s)	
	10/598,615	WATANABE ET AL.	
	Examiner	Art Unit	
	JOHN PAK	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *18-25* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *18-25* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

All previously pending claims have been canceled, and claims 18-25 have been added.

On 7/21/2011, applicant filed a request for continued examination under 37 CFR 1.114. However, because the prosecution in this application was not closed at that time, the request could not be granted. 37 CFR 1.114(a), (b). The submissions filed on 7/21/2011 have been treated as a response to the Non-Final Office action of 2/1/2011.

New Matter

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claim 18 recites method steps that were not disclosed in the originally filed disclosure, at least not in the breadth that they are set forth in claim 18.

(1) Specification page 7, lines 11-14, disclose (emphases added):

> The method for applying the present composition to trees **consists of drilling** a hole in the trunk with a drill and so forth **at a location lower than** the site where the tree is felled ....

Therefore, the step of drilling a hole at a location lower than the cut area of the tree when it is felled is not part of the claims, and for this reason the presently claimed invention fails to find adequate descriptive support from the originally filed disclosure.

(2) Claim 18 recites a drying step, "allowing it to dry," but the drying time period and type of drying (air or kiln) are not set forth. There is only one mention of a drying step in the originally filed disclosure, and that disclosure is limited to air drying for 3 months in the shade. Specification page 11, lines 15-23. Therefore, the step of drying for 3 months in the shade is not part of the claims, and for this reason the presently claimed invention fails to find adequate descriptive support from the originally filed disclosure.

(3) None of the dependent claims cures these deficiencies so they are included in this ground of rejection.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18, 20, 21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grosman et al.

Grosman et al. explicitly disclose injecting, inter alia, emamectin + 5% thiamethoxam *or* 5% imidacloprid to loblolly pine trees by using a pressurized injection

system, wherein 20-80 ml of the emamectin + thiamethoxam were administered or 30-120 ml of imidacloprid were administered (page 147, “Materials and Methods” and Table 1). Pre-drilled holes were used (page 147, right column, last full paragraph). Insect damage to uncut trees is reduced, and protection duration is long-term (see entire article and the “Conclusions” section and table 4 on pages 151-52).

It is recognized that Grosman et al. do not explicitly disclose obtaining lumber. However, Grosman's trunk-injected loblolly pines are trees commonly used for lumber and they would have been expected by the ordinary skilled artisan to be harvested for lumber products.

It is also recognized that Grossman et al. do not explicitly disclose allowing the felled tree to dry, and processing the felled tree into a lumber product, which processing does not include termite-proofing treatment. Allowing a drying period would have been obvious to the ordinary skill artisan, who would have been motivated to avoid green wood for processing the felled tree into lumber. As for not termite-proofing, this would have been done (i.e. termite-proofing is not done) for wood that finds use in geographical areas where termites are not a problem or in products that typically do not require termite-proofing (e.g. furniture, hardwood flooring).

Grossman et al. do not specify a water-miscible solvent or a surfactant, but it is noted that Grossman et al. used commercial water dispersible granules for thiamethoxam and an emulsified concentrate for imidacloprid (page 147, treatments 4 to 6). An emulsified concentrate contains a solvent and surfactant, so their use and

modification in Grossman's method would have been obvious for formulating any of the active agents. Further, a solvent that is not miscible in water would not translocate and provide systemic treatment to the injected tree, so selection of a water-miscible solvent would have been obvious to the ordinary skilled artisan. Specific amounts of solvent and surfactant such as those recited in claims 24-25 would have been obtained from routine optimization of delivery efficacy and formulation stability.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited reference.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-175914[1] taken with the acknowledged prior art, in view of Kim et al.[2], Derwent abstract 1992-094612 and Senn (US 2003/0181448).

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[1] Applicant submitted a Derwent abstract of this document. See the IDS of 9/6/2006, the third non-patent literature. This Office action will refer to this abstract for translation purposes. A full machine translation of the source document JP 8-175914 is provided herewith, as well as partial translation (human translation) of claims 1-3 and paragraphs 12, 13 and 25.

[2] Submitted by applicant in the IDS of 9/6/2006, the first non-patent literature.

JP 8-175914 discloses injecting into a tree trunk a composition comprising (i) 1-50 wt% or 5-20 wt% of an insecticide that is poorly soluble in water, (ii) 1-60 wt% or 5-30 wt% of a nonionic surfactant, and (iii) 10-80 wt% or 30-70 wt% of water and/or solvent that can be mixed with water (see human translation of claims 1-3 and paragraphs 12-13 and 25). Suitable nonionic surfactants include polyoxyethylene hardened castor oil and polyoxyethylene alkyl ethers; and suitable solvents include lower alcohols, glycol esters and acetone (see the Derwent abstract). Method of first drilling a hole and then injecting the composition is disclosed (human translation of paragraph 13). Protection of pines from wilting or withering is obtained (human translation of paragraphs 13 and 25; see also "USE/ADVANTAGE" in the Derwent abstract.

Applicant acknowledges that rot-proofing and termite-proofing structural wood material by injecting into the trunks of standing trees is a known and easy method, but one that is "hardly used at all at present" because of poor efficiency (specification page 2, lines 19-25). Injecting chemicals into lumber under pressure is also known (specification page 2, lines 24-25).

Kim et al. disclose trunk injection of 15% thiamethoxam to control Corythucha ciliata (sycamore lace bug).

Derwent abstract 1992-094612 discloses introducing insecticides into tree trunk through pre-drilled holes, which improves the quality of wood from treated tree during

storage and transport due to reduction of pests. Systemic transportation of the insecticide throughout the trunk volume is disclosed.

Senn et al. disclose thiamethoxam as having termiticidal activity (see entire disclosure, in particular paragraphs 6-19, 21, 28). 0.1-99 wt% formulations are disclosed (paragraph 19). Protection of wood (paragraph 21) and plants in forestry (paragraph 28) from attack of various wood-destroying pests is disclosed.

The difference between the claimed invention and JP 8-175914 is that JP 8-175914 does not explicitly disclose the steps of felling the treated (injected) tree, allowing it to dry and then processing it into lumber product without a termite-proofing treatment step. However, the trees that JP 8-175914 treats are pine trees, and pine trees and well known for their use as lumber products. Felling the trees at least 3 months after the injecting step would have been obvious – JP 8-175914 teaches protecting from wilting or withering, and the ordinary skilled artisan would have been motivated to harvest the recovered or protected trees after sufficient time has passed for good growth. Allowing a drying period for 3 months or more would have been obvious to the ordinary skill artisan, who would have been motivated to avoid green wood for processing the felled tree into lumber. As for not termite-proofing, this would have been done (i.e. termite-proofing is not done) for wood that finds use in geographical areas where termites are not a problem or in products that typically do not require termite-proofing (e.g. furniture, hardwood flooring).

Selection of thiamethoxam as the insecticide in JP 8-175914 would have been suggested from the excellent protective actions disclosed by Senn et al. and also from the known trunk injection application of thiamethoxam by Kim et al. Protection of pine trees (from JP 8-175914) trunk-injected with thiamethoxam against wood-destroying pests such as termites would have been suggested from the known insecticidal actions of trunk-injection applications (JP 8-175914; Kim et al.; Derwent abstract 1992-094612), the known termiticidal activity of thiamethoxam (Senn et al.), and the known protection of wood produced from trunk-injected insecticides (acknowledged prior art; Derwent abstract 1992-094612).

The ingredient percentages recited in claims 24-25 would have been well within the skill of the ordinary skilled artisan based on the teachings of the above cited references, in particular JP 8-175914, Kim et al. and Senn et al. The ordinary skilled artisan would have been motivated to formulate thiamethoxam with a water-miscible solvent and a surfactant because increased solubility improves translocation inside the tree body and sustains protection (JP 8-175914, human translation of paragraph 25), and effective amounts of solvents and surfactants are within the skill of the ordinary skilled artisan based on the teachings of prior art formulations and ordinary skill in routine optimization.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly

disclosed or suggested by the teachings of the cited references. Applicant's specification data has been reviewed in this regard, but it appears to show no more than the expected termite controlling activity from a known termiticide, thiamethoxam.

Applicant's arguments relative hereto, filed in the response of 7/21/2011, have been given due consideration, but they were deemed unpersuasive.

Applicant criticizes each cited prior art reference individually without considering what they combine to teach and suggest to the ordinary skilled artisan. JP 8-175914 discloses injecting into a tree trunk a composition comprising (i) 1-50 wt% or 5-20 wt% of an insecticide that is poorly soluble in water, (ii) 1-60 wt% or 5-30 wt% of a nonionic surfactant, and (iii) 10-80 wt% or 30-70 wt% of water and/or solvent that can be mixed with water (see human translation of claims 1-3 and paragraphs 12-13 and 25). Selection of thiamethoxam[3] as the insecticide would have been obvious Senn's and Kim's teachings, supra.

Applicant consistently argues that most of the cited references do not teach of suggest tree injection for post felling lumber product protection. The Examiner maintains that no termite-proofing protection is needed for lumber products that are not intended as building materials, e.g. lumber for furniture making or toys.

Notwithstanding the position that the claims are readable on obtaining lumber products that could be used in furniture and toys, the ordinary skilled artisan would have also recognized from the teachings of Derwent abstract 1992-094612 that injecting

standing trees with insecticides improves the quality of the harvested wood during storage and transport due to the systemic transportation of the insecticide throughout the trunk volume. Therefore, in certain applications, the step of not including a termite-proofing treatment would have been suggested.

For these reasons, applicant's arguments are found unpersuasive and this ground of rejection must be applied to the new claims.

Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-175914 taken with the acknowledged prior art, in view of Kim et al., WO 2004/108372 and Senn (US 2003/0181448).

Teachings of all of the cited prior art except WO 2004/108372 were discussed above and the discussion there is incorporated herein by reference.

WO 2004/108372 discloses injecting insect controlling chemicals into a pre-drilled injection hole of a tree before being cut down for wood, which produces a functional wood having insect control properties (see English abstract).

The difference between the claimed invention and JP 8-175914 is that JP 8-175914 does not explicitly disclose the steps of felling the treated (injected) tree, allowing it to dry and then processing it into lumber product without a termite-proofing treatment step. However, the trees that JP 8-175914 treats are pine trees, and pine trees and well known for their use as lumber products. Felling the trees at least 3

[3] Thiamethoxam was admitted by applicant as being virtually insoluble or only slightly soluble in water.

months after the injecting step would have been obvious – JP 8-175914 teaches protecting from wilting or withering, and the ordinary skilled artisan would have been motivated to harvest the recovered or protected trees after sufficient time has passed for good growth. Allowing a drying period of 3 months or more would have been obvious to the ordinary skill artisan, who would have been motivated to avoid green wood for processing the felled tree into lumber. As for not termite-proofing, this would have been done (i.e. termite-proofing is not done) for wood that finds use in geographical areas where termites are not a problem or in products that typically do not require termite-proofing (e.g. furniture, hardwood flooring).

Selection of thiamethoxam as the insecticide in JP 8-175914 would have been suggested from the excellent protective actions disclosed by Senn et al. and also from the known trunk injection application of thiamethoxam by Kim et al. Protection of pine trees (from JP 8-175914) trunk-injected with thiamethoxam against wood-destroying pests such as termites would have been suggested from the known insecticidal actions of trunk-injection applications (JP 8-175914; Kim et al.; WO 2004/108372), the known termiticidal activity of thiamethoxam (Senn et al.), and the known protection of wood produced from trunk-injected insecticides (acknowledged prior art; WO 2004/108372).

The ingredient percentages recited in claims 24-25 would have been well within the skill of the ordinary skilled artisan based on the teachings of the above cited references, in particular JP 8-175914, Kim et al. and Senn et al. The ordinary skilled

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See the amended claims of 9/6/2006

artisan would have been motivated to formulate thiamethoxam with a water-miscible solvent and a surfactant because increased solubility improves translocation inside the tree body and sustains protection (JP 8-175914, human translation of paragraph 25), and effective amounts of solvents and surfactants are within the skill of the ordinary skilled artisan based on the teachings of prior art formulations and ordinary skill in routine optimization.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references. Applicant's specification data has been reviewed in this regard, but it appears to show no more than the expected termite controlling activity from a known termiticide, thiamethoxam.

Publication date of WO 2004/108372 is before the filing date of the international application from which this 371 application is based but after the filing date of the foreign priority application, JP 2004-066675. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Applicant states in the response filed on 7/21/2011 that applicant's intent is to perfect the claim of foreign priority by filing a translation. The translation has not been made of record yet so this ground of rejection cannot be withdrawn. Applicant is advised to correctly follow the procedure for filing the translation – the translation must

accompany a statement by the translator that the translation of the certified document is accurate. MPEP 201.15.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7-10 of copending Application No. 10/598,616, in view of the acknowledged prior art, Derwent abstract 1992-094612 and Senn (US 2003/0181448). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Copending claims 1, 5, 7-10 are directed to methods for preventing damage to trees caused by various pests or diseases. The methods inject neonicotinoid-based insecticides clothianidin, dinotefuran or thiamethoxam into a tree trunk in compositions comprising the insecticide, water, organic solvent, and surfactant, all of which overlap with the ingredients and percentages of the instant application claims.

Applicant acknowledges that rot-proofing and termite-proofing structural wood material by injecting into the trunks of standing trees is a known and easy method, but one that is "hardly used at all at present" because of poor efficiency (specification page 2, lines 19-25). Injecting chemicals into lumber under pressure is also known (specification page 2, lines 24-25).

Derwent abstract 1992-094612 discloses introducing insecticides into tree trunk through pre-drilled holes, which improves the quality of wood from treated tree during storage and transport due to reduction of pests. Systemic transportation of the insecticide throughout the trunk volume is disclosed.

Senn et al. disclose thiamethoxam as having termiticidal activity (see entire disclosure, in particular paragraphs 6-19, 21, 28). 0.1-99 wt% formulations are disclosed (paragraph 19). Protection of wood (paragraph 21) and plants in forestry (paragraph 28) from attack of various wood-destroying pests is disclosed.

The difference between the claimed invention and the invention of the copending claims is that the copending claimed invention does not explicitly disclose obtaining

termite-proofed lumber from trunk-injected trees by felling the injected tree, drying it, and processing into lumber product without including a termite-proofing treatment step.

Protection of trees trunk-injected with thiamethoxam or other neonicotinoid insecticides from wood-destroying pests such as termites would have been suggested from the known insecticidal actions of trunk-injection applications (Derwent abstract 1992-094612), the known termiticidal activity of thiamethoxam (Senn et al.), and the known protection of wood produced from trunk-injected insecticides (acknowledged prior art; Derwent abstract 1992-094612).

Felling the treated trees for subsequent commercial purposes would have been obvious to the ordinary skilled artisan, especially when the trees are pine and cherry trees (copending claims 8 and 10). Allowing a drying period for 3 months or more would have been obvious to the ordinary skill artisan, who would have been motivated to avoid green wood for processing the felled tree into lumber. As for not termite-proofing, this would have been done (i.e. termite-proofing is not done) for wood that finds use in geographical areas where termites are not a problem or in products that typically do not require termite-proofing (e.g. furniture, hardwood flooring).

Therefore, one of ordinary skill in the art would have recognized the instant invention as an obvious variation of the invention set forth in the copending application claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant argues in the response filed on 7/21/2011 that this ground of rejection is improper because it looks beyond the claims of the copending application by relying on other prior art references. Applicant is requested to cite direct authority for this position. The Examiner cites the MPEP 804, form paragraph 8.37, which permits the use of secondary references in a provisional obviousness-type double patenting rejection. The ground of rejection is therefore maintained.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620.** The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Pak/
Primary Examiner, Art Unit 1616